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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/510,996	07/20/2005	Carl William Riley	7175-202356	6694

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HILL-ROM SERVICES, INC.
Legal Dept., Mail Code K04
1069 State Road 46 East
BATESVILLE, IN 47006

EXAMINER

SANTOS, ROBERT G

ART UNIT	PAPER NUMBER
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3673

MAIL DATE	DELIVERY MODE
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07/14/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/510,996

Applicant(s)

RILEY ET AL.

Examiner

Robert G. Santos

Art Unit

3673

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 April 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 15-21, 23, 25, 27-35, 37, 38, 61-67, 76, 80-82, 87, 88 and 95-111 is/are pending in the application.
- 4a) Of the above claim(s) See Continuation Sheet is/are withdrawn from consideration.
- 5) ☒ Claim(s) 104-108 is/are allowed.
- 6) ☒ Claim(s) 15, 16, 21, 32-35, 61, 62, 101, 102 and 109-111 is/are rejected.
- 7) ☒ Claim(s) 23, 67 and 95-98 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 20080421
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date: _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

Continuation of Disposition of Claims: Claims **withdrawn** from consideration are 17-20,25,27-31,37,38,63-66,76,80-82,87,88,99,100 and 103.

DETAILED ACTION

Election/Restrictions

1. Newly submitted claims 99, 100 and 103 are directed to an invention that is independent or distinct from the invention originally claimed for the following reasons: Claims 99, 100 and 103 recite structural limitations that are associated with a non-elected species.

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claims 99, 100 and 103 have been withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 15, 16, 21 and 101 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Pat. No. 4,794,248 to Gray. As concerns claims 15 and 16, Gray shows the claimed limitations of a patient support apparatus comprising a first component (10); a second component (20) configured to move relative to the first component along a path of travel (as described in column 2, lines 40-44); a detection unit comprising: a single emitter (any one of the elements 12 as shown in Figures 1 & 2 and as described in column 2, line 45) supported by one of the first

and second components and a plurality of detectors (23) supported by the other of the first and second components (also as shown in Figures 1 & 2 and as described in column 2, line 46), the detectors configured to provide a control signal in response to an obstacle within the path of travel between the emitter and any one of the plurality of detectors (as described in column 3, lines 48-59); and a control unit in communication with the detector and configured to prevent relative movement of the first and second components in response to the control signal (as shown in Figure 6 and as described in column 3, lines 30-59), wherein the emitter generates an obstacle detection signal (also as described in column 3, lines 30-59). With respect to claims 21 and 101, the references discloses conditions wherein the emitter comprises an infrared source and wherein the obstacle detection signal is a wireless signal (see column 2, lines 54-56 and column 3, lines 30-59).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 32-35, 61, 62 and 109-111 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gray '248 in view of U.S. Pat. No. 3,970,846 to Schofield, Jr. et al. With regards to claims 32, 33, 61, 62 and 109-111, Gray does not specifically disclose the use of an indicator in communication with the control unit, wherein the indicator is configured to indicate failure of any one of the plurality of detectors to detect an obstacle detection signal emitted by

the single emitter, a stop signal that is generated if at least one of the detectors fails to detect the obstacle detection signal, wherein movement of the component is prevented in response to the stop signal, and wherein the obstacle detection signal includes a pulsed portion having a predefined frequency, and the detector is configured to detect the predefined frequency.

Schofield, Jr. et al. provide the basic teaching of a presence detecting system comprising a control unit (44), a single emitter (20 or 32), a plurality of detectors (22, 34), and an indicator (40) in communication with the control unit, wherein the indicator is configured to indicate failure of any one of the plurality of detectors to detect an obstacle detection signal emitted by the single emitter, a stop signal that is generated if at least one of the detectors fails to detect the obstacle detection signal, wherein movement of the component is prevented in response to the stop signal, and wherein the obstacle detection signal includes a pulsed portion (E) having a predefined frequency, and the detector is configured to detect the predefined frequency (as shown in Figures 2 & 3 and as described in column 4, lines 64-68; column 5, lines 1-4; column 6, lines 24-27; and column 9, lines 36-41). The skilled artisan would have found it obvious at the time the invention was made to provide the patient support apparatus of Gray with the additional structure of an indicator in communication with the control unit, wherein the indicator is configured to indicate failure of any one of the plurality of detectors to detect an obstacle detection signal emitted by the single emitter, a stop signal that is generated if at least one of the detectors fails to detect the obstacle detection signal, wherein movement of the component is prevented in response to the stop signal, and wherein the obstacle detection signal includes a pulsed portion having a predefined frequency, and the detector is configured to detect the predefined frequency, in order to readily and efficiently ensure proper functioning of the

presence detecting system of the patient support apparatus, thereby ensuring further proper support and comfort of a patient positioned on the apparatus.

As concerns claims 34 and 35, Gray as modified by Schofield, Jr. et al. do not specifically disclose the particular frequency and duration of the signal as claimed. It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the patient support apparatus of Gray as modified by Schofield, Jr. et al., with a wireless signal that includes a pulsed portion having the particular frequency and duration as recited in Applicants' claims, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

6. Claim 102 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gray '248. Gray does not specifically disclose a wireless signal which is an electromagnetic curtain; the skilled artisan would have found it obvious at the time the invention was made to modify the Gray reference by providing a wireless signal which is an electromagnetic curtain since Applicants have not disclosed that specifically providing a wireless signal in the form of an electromagnetic curtain solves any stated problem or is for any particular purpose and it appears that the patient support apparatus of Gray would perform equally well with other types of wireless signals.

Response to Amendment

Applicants' arguments on pages 14-18 with respect to the claims have been considered but are moot in view of the new ground(s) of rejection.

Allowable Subject Matter

7. Claims 23, 67 and 95-98 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. The examiner respectfully asserts that one of ordinary skill in the art would not have found it obvious at the time the invention was made to provide the patient support apparatus of Gray with a lifting device configured to move the second component *vertically relative to the first component*, a movable component which includes *an articulating deck movable relative to an elevating frame*, and with the structural combination of a first component which is a base frame and a second component which is an elevating frame *configured to move along the path of travel above the base frame*, as respectively recited in dependent claims 23, 67 and 95.

8. Claims 104-108 are allowed. The examiner respectfully asserts that none of the prior art, taken either singly or in combination, is seen to teach or suggest the distinct structural configuration of the patient support apparatus in combination with the particular emission paths of the signals relative to the sides of the patient support apparatus as explicitly recited in independent claim 104.

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Menkedick et al. '748, Chen et al. '716, Amend '362, Amend et al. '931, Gray '668, Hamada et al. '169, Schimko '508, Weber et al. '124, Svensson '403, Sick et al. '043, De Missimy et al. '061, Pronovost '863 and Eames '521.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert G. Santos whose telephone number is (571) 272-7048. The examiner can normally be reached on Monday through Friday, 11:00 a.m. to 7:30 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patricia L. Engle can be reached on (571) 272-6660. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Robert G. Santos/
Primary Examiner, Art Unit 3673